

ACTION-RESEARCH

Planned Parenthood as a Public Health Imperative: A Participatory Research Exploring the Use of Contraception by Indigenous Women of Chilcapamba, Ecuador

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Background: Government policies have led to an increase in modern contraception use. Rural indigenous populations in countries like Ecuador, however, have relatively lower rates of utilization. Our objectives were to work with the community to identify perceived barriers for contraception use and determine solutions for an indigenous Ecuadorian community.

Methods: Using a qualitative descriptive study design based on participatory research principles, focus groups and individual semi-structured interviews were conducted with women in the community as well as semi-structured interviews with physicians working at the regional hospital. All sessions were taped, transcribed, translated and analyzed using descriptive thematic analysis.

Results: Women had basic knowledge about contraception, but also had many fears related to false beliefs about side effects. Women using modern contraception spoke of difficulties getting to a doctor to get a prescription. They had a relationship of trust with their partners although men were perceived to have preponderant decisional powers. Physicians suggested creating a mobile team to provide information about maternal health and to distribute contraceptives directly in the communities.

Conclusions: There is need for rural communities to have better information and access to contraception. While the Ecuador national contraception policy has made an impact, several practical barriers prevented optimal implementation.

Keywords: Contraception; Community-based participatory research; Indigenous; Ecuador; Family Planning Policy

Introduction

The United Nations estimated that the world population will reach 9.7 billion by 2050, and 11.2 billion by 2100 (Department of Economic and Social Affairs, United Nations, 2015) creating significant burdens and resource issues. This exponential population growth also comes with challenges such as those posed by high rates of maternal and infant mortality. Current world estimates reveal as many as 830 maternal deaths occur daily, with adolescent girls (<15 years of age) in developing countries at highest risk (World Health Organization, 2016). The Global Strategy for Ending Preventable Maternal Mortality aims to address inequalities in access and quality of reproductive, maternal and infant health care services. Worldwide, public awareness about the benefits of planned parenthood through contraception has been increasing with family planning programs initiated in the 1960's, leading to an increase in the prevalence of contraceptive use (Cleland et al., 2006). With recent political climate changes resulting in decreased support and funding for family planning activities, the critical benefits of ensuring reproductive care access to all are of major concern (Silver & Kapa-

dia, 2017). An American observational study demonstrated the impact of removing family planning from a women's health program and its adverse consequences on low-income women in reducing the provision of effective methods of contraception, discontinuing contraceptive use, and increasing the numbers of deliveries (Stevenson, Flores-Vazquez, Allgeyer, Schenkkan, & Potter, 2016). In 2013, 81% of governments provided direct support for family planning (United Nations, Department of Economic and Social Affairs, Population Division, 2014), yet maternal mortality continues to be an issue (The World Bank, 2015). Even when governmental policies support accessible contraceptive means, women and their families are still confronted with barriers to access contraceptives (American Congress of Obstetricians and Gynecologists to Contraception [ACOG], 2015). Recognized as a remarkably cost-effective public health intervention, low resource settings too often depend not only on governmental policies but also international funding (Prata, 2009).

This situation is exemplified in Latin America where governments perceived a definite need for family planning assistance due to rapid population growth. In 1993, during the Latin American and Caribbean Regional Conference on Population and Development, a recommendation from the participating governments was endorsed to encourage support for reproductive health and family planning (Latin America & Caribbean Population Development Conference (1993: Mexico City), 1994) and stated that family planning should be considered a universal human right. In 1994, Ecuador was the first Latin American country to explicitly address reproductive and sexual rights with the *Ley de Maternidad Gratuita y Atención a la Infancia (LMGYAI)* (Goicolea, San Sebastián, & Wulff, 2008; Hermida et al., 2005). The objective of this law was to provide free health care to pregnant women, women of childbearing age and young children including family planning, pre-natal care during pregnancy, delivery, postnatal care and vaccines for children five years or younger (Hermida et al., 2005) to address the issues of the most vulnerable populations, and to establish health as a civil right and to decrease the rates of maternal and infant mortality (Hermida et al., 2005).

Although modern contraceptive use has risen worldwide, there is a disparity in urban versus rural indigenous populations who have lower rates of utilization (Terborgh et al., 1995). A study conducted in the Amazon basin reported the most prevalent contraception method used by indigenous women is the rhythm method with almost half the pregnancies reported being unwanted (Goicolea et al., 2008). This discrepancy can also be observed in the number of skilled attendants at delivery, as a means to decrease maternal and infant mortality. For urban areas between 1977 and 2006, the number of skilled delivery attendance workers increased from 56 to 81% while rurally the rates increased from 7 to 15% (Goicolea et al., 2008). Many potential barriers to modern contraceptive use for indigenous women have been identified and include male attitudes, education, personal fears, location of services, and language and discrimination in medical institutions (Terborgh et al., 1995). Overall, information is lacking on how national policies are implemented and evaluated at a local level, with great need for in-depth explorations of facilitators and barriers to implementation with potential strategies to overcome barriers. The objectives of this study were to evaluate understanding of contraception and barriers to modern contraceptive use in an indigenous population of Ecuador and to reveal community-generated recommendations.

Methods

The project used a participatory approach where the community and the researchers are in partnership throughout the research: finalizing the research questions, undertaking data collection, interpreting the findings and joint dissemination of the results (Allen 2016; Cargo & Mercer, 2008; Macaulay et al., 1999; Salsberg 2018). Since 2008, the Department of Family Medicine at our institution has engaged in a participatory research partnership with the rural indigenous community of Chilcapamba, Province of Imbabura, Canton of Cotacachi, Ecuador where the research topic is chosen by the community and each summer a Spanish-speaking medical student travels to the community (Dube, 2015; Evans, 2010; Misra et al., 2018). The partnership is supported through the medical faculty's Medical Student's Research Bursary Program. In a competitive application process, the successful applicant travels to the community to work on a topic that the community members determined in the prior year, works with both faculty members and community leadership through the winter to facilitate the community's involvement in the design, data collection, data interpretation, and dissemination of the respective research projects (Dube, 2015). The 2-months research visit is spent in Chilcapamba, living with a family in the community and is closely supervised long distance by a team from the Department of Family Medicine. Further details on prior topics and the community structure are detailed by Dubé et al (2015). Chilcapamba is a small Andean village with a population of approximately 400 people in which both indigenous and *mestizas* (a person of mixed race) families live. The closest health care institution is the Health Center of Quiroga (20 minutes away walking) followed by the Hospital Asdrubal de la Torre (15 minutes away by bus from Quiroga). For this project, the research

representative from Chilcapamba was the president of the community. The topic of women’s reproductive health in Chilcapamba was identified as a key health concern in community discussions in the previous year. For this academic- community partnership, the project was approved by both McGill’s Institutional Review Board and by the Hospital Asdrubal de la Torre, to ensure both academic excellence and respect for community expertise and values, and allows for amendments to be submitted to McGill if needed after the student has arrived in Chilcapamba (Evans, 2010; Misra et al, 2018).

A qualitative descriptive design was used to plan and conduct the study from July to August 2011 (Neergaard, Olesen, Andersen, & Sondergaard, 2009). A purposeful, flexible sampling strategy was employed with maximum variation sampling (Green & Thorogood, 2014). Although purposeful, there was also an element of convenience sampling, to the extent that community members were included on the basis of their accessibility and willingness to participate. Women between the ages of 18 and 45 years old of the Chilcapamba community were invited to participate in the focus groups via the community leaders. Informed consent was obtained. Consenting women were asked to complete an identification form to obtain general socio-demographics. Questions on the identification form ascertained their willingness to join a focus group and, for those who self-identified as using modern contraception, participation in an individual semi-structured interview.

Eight focus groups were planned with questions for the focus groups and individual interviews guided by the Andersen’s Behavioral Model of Health adapted for vulnerable populations by Gelberg et al. (1999) as healthcare utilization depends on predispositions of the healthcare system, patients’ needs and social characteristics. The focus groups and interviews were planned to assess population characteristics that include predisposing factors, enabling factors and need as well as health behavior based on personal health practices and use of health services (Figure 1). This was linked to potential solutions to improve health outcomes related to reproductive health. As illustrated in Figure 1, health beliefs were evaluated with general attitudes to contraception and were considered a predisposing characteristic. Perceived barriers in accessing contraceptive means were evaluated as a measure of personal, family and community resources, as well as perceived health and were considered as measuring enabling characteristics and need, respectively. Culturally sensitive solutions to improve health behaviors were explored through the lens of personal health practices. Each focus group lasted one to two hours and the community president and medical trainee researcher acted as co-moderators. Open-ended questions in Spanish were used and translation if questions and discussions in Quichua (the local Indigenous language) was performed when required by the community president.

The focus groups were followed by invitational 45-minute, individual semi-structured interviews, again in partnership with the community president and medical trainee, with women who reported using modern contraception. These were conducted in Spanish with translation into Quichua if needed. These interviews were to gain a more detailed understanding of the women’s experiences and expectations about

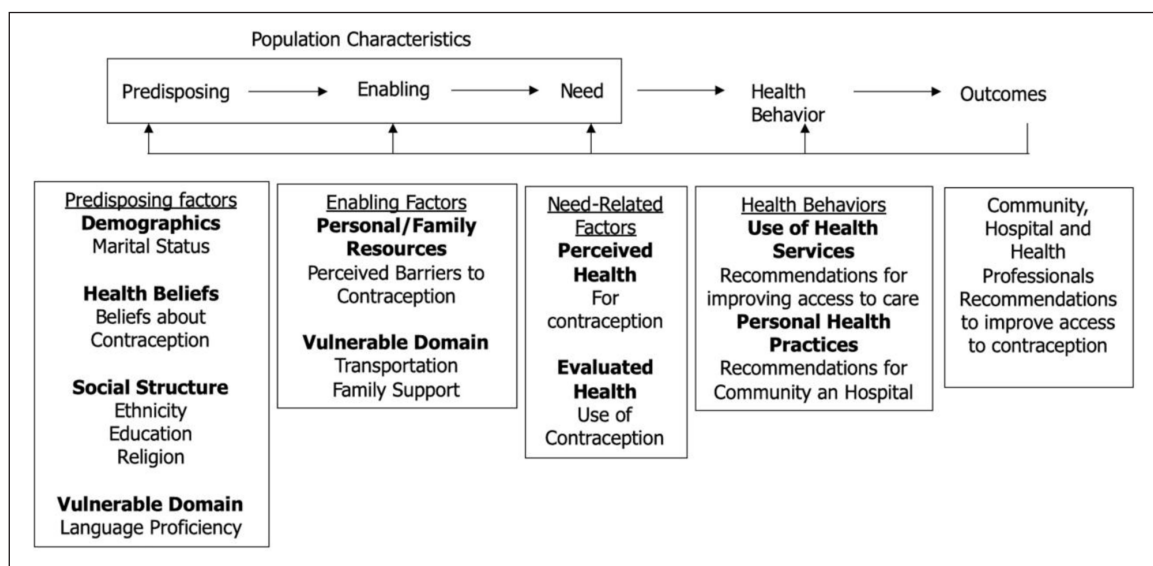


Figure 1: Factors Retained from Andersen’s Behavioral Model of Health Adapted for Vulnerable Populations by Gelberg et al. (1999).

contraception use with respect to cultural, socio-economic, and medical contexts. The questions included the selection of contraceptive method, the extent of sexual education, and the couple's relationship dimensions. Questions were skipped if they made a woman feel uncomfortable.

To explore barriers and possible solutions to accessing and using contraception from the local health care perspective and to become familiar with the modern contraceptive methods available in the region, semi-structured interviews by MR took place in Spanish with physicians working at the Hospital Asdrubal de la Torre. These medical professionals were chosen based on their relevant expertise and voluntary agreement to participate in the study.

All the sessions were recorded, transcribed verbatim in Spanish (Mays & Pope, 1995) and evaluated using thematic analysis (Green & Thorogood, 2014). Three key principles of focus group and participatory research guided interpretation of the data. First, each focus group was the unit of analysis not the individual participants. Also, the data was analyzed sequentially to allow for new questions and probes to be developed in subsequent groups. Finally, the researcher (with supervision from the McGill team) and the community leader, who assisted in the focus groups and interviews, were both involved in the interpretation of the data and thematic analysis while in the field. The researcher discussed the findings in Spanish with the doctors specializing in obstetrics and gynecology at Hospital Asdrubal de la Torre, and the community leader summarized the results for discussion with the community in Quichua (the local Indigenous language) after the researcher had returned home. All academic disseminations were finalized through long distance discussions with the community leader, who was also a co-author, and included a poster presented by the medical student at the University bursary competition day in fall 2011 (Dube 2015; Ramsden 2017).

Results

Eight focus groups were completed with three to eight participants each for a total of 25 indigenous and 10 *mestizas* women. Four groups included only indigenous women, one had only *mestizas* and three were mixed. Eight interviews were undertaken with women using different contraceptive means (intra-uterine device, tubal ligation, hormonal pills, and hormonal injections). **Table 1** presents the predisposing factors in terms of socio-demographic information of the participants. More than half preferred to express themselves in Quichua. At the hospital, one gynecologist, two obstetricians and two obstetrics residents agreed to be interviewed.

Table 1 shows that women had limited levels of formal education with only 28.6% reaching high school (complete or not) and that more than half (51.4%) did not use modern contraceptives. Several themes were identified from the focus groups that align with enabling and need related factors including importance of family planning for financial reasons, misconceptions of safety and effectiveness, attitude of male partners, accessibility and lack of reliable information. Potential solutions were also presented after soliciting ideas during the focus groups with both women participants and the medical personal.

Thematic analysis revealed eight distinct topics that corresponded with predisposing factors, enabling factors and health behaviors. These were organized under three themes and the fit with the theoretical model are summarized in **Table 2**. The sub-themes associated with these three themes were Health Beliefs under Predisposing Factors; Social Support, Personal Resources and Community Resources as Enabling Factors; and Personal Health Practices under Health Behaviours. The details are summarized below.

Predisposing Factors: Health Beliefs

A common sub-theme under the theme of health beliefs identified by participants was the misconceptions about modern contraception methods. This tended to be linked to concerns about safety that were not related to reliable medical information. The women often used close friends and families for sources of information, reinforcing many of these misconceptions. The stated mistrust about the effectiveness of modern contraceptives included women and their partners who were fearful of getting pregnant while using contraception. It was unclear if it was a lack of trust in the methods, in their use of it, or a lack of understanding of the mechanism, as noted by one participant, "Tubal ligation is a tie of the Fallopian tubes, it is a tie and sometimes when they don't do it well, the person can die." Another stated,

I am afraid sometimes, I am telling you that some people told me that with, how do you call it, the injections anything can be picked up diseases and things like that, and in the hospitals I encountered friends to which these things happened, that they started to, well they could not eat, they

Table 1: Socio-demographic characteristics of the women participants.

Participant characteristics	n (%)
Language spoken	
Quichua	3 (8.6)
Spanish	9 (25.7)
Spanish and Quichua	23 (65.7)
Schooling	
None or primary incomplete	12 (34.3)
Primary completed	13 (37.1)
High school or college (complete or incomplete)	10 (28.6)
Marital status	
Single	5 (14.3)
Married or in a relationship	30 (85.7)
Ethnic background	25 (71.4)
Indigenous	
<i>Mestiza</i>	10 (28.6)
Contraception method currently or most commonly used	18 (51.4)
None	
Injections	5 (14.3)
Pills	4 (11.4)
Tubal ligation	6 (17.1)
Intra-Uterine Device	2 (5.7)

Notes: ^aN = 35 participants; ^b Mean age of participants: 32 years; ^c Mean number of children per participant: 3.2.

Table 2: Results of thematic analysis and fit with theoretical framework.

Themes Identified from Focus Groups/Interviews	Fit with Andersen's Behavioural Model (Themes: Sub-themes)	Implication Access/Use of Modern Contraception
Misconceptions about modern contraception methods	Predisposing Factor: Health Beliefs	Several misconceptions decreasing likelihood of use
Mistrust about the effectiveness of modern contraceptives	Predisposing Factor: Health Beliefs	Incorrect information decreasing likelihood of use
Knowledge about sexually transmitted diseases (STD)	Predisposing Factor: Health Beliefs	Insufficient knowledge decreasing likelihood of use
Role of Male Partners	Enabling Factor: Social Support	Male views decreasing likelihood of use
Role of family income on use of family planning	Enabling Factor: Personal Resources	Belief that increased access would improve family income increasing likelihood of use
Accessibility of family planning	Enabling Factor: Community Resources	Poor accessibility decreasing likelihood of use
Access to family planning information	Enabling Factor: Community Resources	Difficult access decreasing likelihood of use
Potential solutions to the current barriers to modern contraceptives	Health Behaviours: Personal Health Practices	Establish trust with use of mobile teams to increase access/use

started to lose weight, one of my friend I saw that she lost a lot of blood so yes I have been afraid sometimes I say that maybe if I was protecting myself well that the same could happen to me.

The lack of information on how modern contraception works and the role of the family members in propagating incorrect information was acknowledged by the health professionals and would likely decrease usage as reflected in this statement,

In the first place, I would say fear, and secondly what relates to the lack of knowledge that there exist methods for family planning, to protect oneself. It could also be the myths themselves. These myths give women fear that getting a type of method will make them become crazy. Already a lot of patients come in the office saying that they don't want to use [modern contraceptives] because 'I will become crazy'.

Another sub-theme that emerged was the women's lack of knowledge about sexually transmitted diseases (STD). The discussion indicated that the lack of knowledge of STDs and how modern contraception may or may not protect the women could have a role in decreased use as reflected by these questions from one of the women,

Could you explain to us a bit more about the diseases that exist? A lot of times, we only know the ones that are mortal which are HIV, the hepatitis, the others as serious as that, only the ones that kill us like the HIV right – but yes it would be good to know about the other diseases, what are they, what do they cause to us, what illnesses do these diseases cause?

Enabling Factors: Social Support

The four sub-themes identified under the theme of Enabling Factors related to social support in the form of the role of male partners, personal resources in the form of family income and its relationship to family planning, community resources in terms of both access to family planning and access to information on family planning. For the first topic, it was clear that men, like the women, did not have access to a lot of information concerning contraception and viewed it as a threat in terms of both safety and also control of their partner. Despite this potential role in men decreasing the likelihood of women using modern contraceptives, women indicated from the interviews that they discussed contraception with their partners and, in the end, even if the women did not have a strong opinion, they are the ones in charge of getting the contraceptive. This view of the male role was reinforced by the health care professions who referred to this as 'machismo'. Different women noted that,

If my partner has any, any doubts or concerns he asks me and yes, yes this way there are men that do not know so for example with tubal ligation they say that if women get tubal ligation, they want to be with more men not only with their husband, that men say, that I heard.

She says that like other husbands, he does not trust the contraceptive means like pills because he thinks that it will give diseases to the woman and that it is preferable to search for a method more natural to protect themselves like the calendar, with that the husband agrees.

I needed to put in consideration to use a method or not to use it, but we [her partner and herself] agreed both and I told him what the doctor had told me that this can be placed here and that it can be used like that and I explained it to him and he told me that it is fine, that it is better to avoid [pregnancy], that life is not to have too many children.

One of the few sub-themes under Enabling Factors that increased the likelihood of using modern contraception was the role of family income on use of family planning. For the majority of younger women, the use of contraceptives was seen as a way to ensure a certain standard of living for their children, and for older women it was a way to be able to continue providing for their families without adding more economic strain. This was reinforced by information obtained during the interviews of current users of contraception who stated, "Is it because I already have six children and, and there is no work, [so] for that reason I do not want more children." Another stated,

The contraceptive means would be for family planning according to the income that I have, to see how many children one can have; I need to have or I don't need to have. And also, it is important that the children also know about contraception so that they can plan.

A significant and major sub-theme in Enabling Factors was community resources in terms of accessibility to family planning. The lack of resources offered to the women and the frequency of the visits needed to obtain modern contraception were problematic especially when it was the health centers distributing the contraceptive means. In addition to getting the contraception, many women currently using contraception would discontinue if there were a charge, cost or lack of immediate availability of the prescription medication. Although the hospital is supposed to cover for the costs of the contraceptive medications, the supplies are often limited, and costs are incurred if patients have to obtain their contraceptives from pharmacies. This negated the positive impact that was identified as women wishing to improve their family income as all these were seen as having an immediate negative financial impact thereby reducing the likelihood of using modern contraceptives. One woman stated, "The majority of people and women work, do the things, work so there is no time to be all day waiting to get a turn at the doctors." Others observed,

You need to wake up early, sometimes you cannot get a turn, sometimes a lot of people wake up really early also so they only give like thirteen turns, fifteen, twenty and not more for each doctor so if there were about fifteen patients before me and I am the seventeenth so I cannot see a doctor that day and I need to wake up early another day and if I only want information I cannot lose a day.

She went to the hospital only with twenty-five cents only with money for the transport and so she went and asked the private pharmacy and they said four dollars and fifty cents or something like that so she did not buy and from that point she stopped using the pill.

Another sub-theme identified in Enabling Factors related to community resources was access to information on family planning information. Participants in the focus groups asked to get other resources and have more access to information. Despite some of the misinformation identified in the previous sub-themes, in the interviews of participants using modern contraception, the majority of women had basic knowledge about the correct use of their contraceptive method and, to some extent, about its mechanism of action. Most of them, however, learnt about it while going for their children's clinical checkups at the hospital. Even with women currently using contraception, they wanted to know more but felt it was not possible to access reliable information in the community and they also worried about the risk of being judged. The healthcare professionals acknowledged that more needs to be done. As one woman stated, "When I had my baby, I had a month to rest and from there I went the following month, I went to family planning, from there they explained to me about the contraceptive methods that exist to protect oneself." Another noted,

If for example if we talk with the midwives or with my mother-in-law or with another person, they see you, they don't see you like, like they want to give you a good tip, they say we have had so many children and because of laziness you do not want more children, something like that, they see you as a person, I don't know, I heard that they talk to other people saying she protects herself, she does that, but we have not done so because we do not want more children or because we do not want to wash more clothes, not to have more leisure, yes I heard that they criticize other people.

Health Behaviors: Personal Health Practices

The theme Health Behaviors identified the sub-theme of potential solutions to the current barriers to modern contraceptives in terms of personal health practices that could have an impact on actual behavior. This sub-theme identifies how the majority of the healthcare professionals interviewed approached the subject of the universal search to provide more understanding and individualized services. The main improvement recognized by all the professionals interviewed was centered on the concept of informing the population to help educate them in terms of options in contraceptive use and also to increase the knowledge about the health services offered to them. Establishing trust was identified as a key factor. The issue of too few supplies was also noted. A major solution was also proposed regarding the establishment of a mobile team providing contraceptive means and information. As the professionals observed,

To give them [the women] more information about all the services we are offering and to break these barriers of myths, break these barriers of fears so they can have more trust in the health care service and access it – so they won't be scared to talk about their concerns so that we can respond and that they feel they received a better attention.

I would suggest first creating health squads, mobile units in which there would be a team – here there is a basic team for health – but in this team there should be an obstetrician I think so that the obstetrician could explain to the indigenous communities, he could explain what are contraceptive means, prenatal control, a lot of women live too far and cannot come up here.

Discussion

This project provided a wealth of information that supported local concerns and further informed the community regarding contraceptive access, and clearly demonstrated that significantly more work is needed to implement national policy. Our findings also provide evidence of men's influence on contraception use, particularly in relation to the perceived control of women's sexual activity. This raises an important issue for the cultural and gender context of Indigenous women's sexual and maternal health that may not be captured in the scope of many policies and their subsequent implementation.

The implementation of the LMGYAI has led to several major improvements for the rural Ecuadorian population in terms of maternal health in a national context where there are significant rural/urban health care provision gaps (Lopez-Cevallos & Chi, 2010). The implementation of this law, however, has various practical issues as demonstrated by this study that may directly contribute to the poor uptake of modern contraception use by indigenous and rural women of Ecuador. The participatory qualitative research approach has resulted in rich results with practical solutions. The results demonstrated the need to explore potential ways to transmit clear, quality information to the community, or any rural community, on a frequent basis and to provide easy, and maybe also free access to contraceptives (Neergaard et al., 2009; Sandelowski, 2000). Sexual health and contraception with regards to men needs further investigation. Thus, studies are now ongoing within the community e.g. via a male-only health seminar and the recruitment of a male community health worker.

Our findings highlight a frequent discrepancy between indigenous and non-indigenous populations' health care access. Canada, America, Australia, and New Zealand's indigenous populations demonstrate persistent birth outcomes disparities (Smylie et al., 2010), such as higher infant mortality rates. Thus, there needs to be improvement in indigenous access to maternal care, obstetric and neonatal care, and social and environmental factors (Smylie et al., 2010). Collaborative efforts and identifying well-developed and efficient programs reducing the gap between indigenous and non-indigenous populations are essential to ensure universal future maternal and infant safety.

There is a definite need for planned parenthood programs to support reproductive, maternal, and infant health care efforts. Governmental policies are key in addressing part of the challenges populations are encountering, but access to these policy changes remains crucial. To diminish existing inequalities there is a need to advocate for access to health care services. There is paucity in the literature on implementation and evaluation of national policies. It is clear that community engagement and partnership are key elements to include in the process of national policy implementation and that the process of implementation remains challenging. A case study in Iran demonstrated various factors affecting the setting and implementation of national health policies (Khayat-zadeh-Mahani, Fotaki, & Harvey, 2013). The decision makers and implementing teams need to be appreciative of the current national political context and be conscious of the too-often-existing discrepancies between rural and urban locations. Reduction of health disparity when implementing specific programs have been shown to benefit from interventions that are targeted to the communities and that are culturally sensitive (Edgerly et al., 2009). Regional or site-specific adaptations are essential to accommodate local needs.

Additional work is required to facilitate women taking full advantage of the LMGYAI and our results help orient future efforts to improve access and limit barriers. The strong research partnership between our institution and Chilcapamba ensures that our partnership research is of importance to the community (Dube et al., 2015) such as that conducted within this study. Due to the insights and at the request of community leaders, our partnership, through a widening ripple effect, led to the exciting development of the Training and Education for Andean Community Health (TEACH) (Jagosh et al., 2015). TEACH comprises of McGill University health professionals working in partnership with community leaders – including the same community leader who partnered on this research project - to train local community health workers (CHWs) to

address maternal and infant health care concerns in Chilcapamba and four other small surrounding communities. TEACH has been able to incorporate the findings of this study and other McGill-Chilcapamba research results into the training of the CHWs in the area. The CHWs now include one man in addition to the original group of women. Although the impact has not been formally evaluated, the TEACH team and the local hospital staff regularly reinforce contraception education for the community health workers who then disseminate this information to their own communities during home visits to both women and men. At the local hospital, however, women continue to have difficulties in accessing both adequate appointments and supplies of contraceptives, and the physician's recommendation to establish mobile health professional teams to visit the communities has not occurred.

Our methods did not discriminate against people who were illiterate, and during the interviews' participants were encouraged to speak in Spanish or Quichua. The focus groups, co-led by the trusted female community leader, likely encouraged participation from people who were hesitant or uncomfortable with individual interviews. Women who wanted to share their experience in more detail and in a personal setting were able to participate to the individual semi-structured interviews. The findings may not be generalizable beyond Chilcapamba and they should be interpreted with caution due to the nature of the existing legislation in Ecuador and our sample being derived from a rural setting and with a majority of indigenous population.

Conclusions

Planned parenthood is a public health imperative, which has also been declared a human right by some countries (Latin America & Caribbean Population Development Conference (1993: Mexico City), 1994). National, regional, or local policies and supportive funding are key to implementing family planning to increase knowledge and use of modern contraception to facilitate choice of family size and decrease maternal mortality. This participatory study has demonstrated that a national family planning policy is not enough, because only half of the women used modern contraceptive methods. Our results show that contraceptives and access to health professionals must be locally available at all times together, with easily accessible culturally sensitive programs to increase contraceptive knowledge for both men and women. We believe that using participatory research supports health by improving "research quality, empowerment, capacity building, sustainability, program extension, and unanticipated new activities" (Jagosh, 2012). Future participatory research with authentic engagement of community members for co-decision making and sharing of power throughout all the research stages in other communities is needed to identify facilitators and barriers to contraceptive use, and also to document local recommendations to fully implement planned parenthood initiatives and national policies (Salsberg, 2015).

Competing Interests

The authors have no competing interests to declare.

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